

In the table of *Halictus* two supposed British species are sunk, *longulus* Sm. and *arnoldi* E. Saund. The former appears to me merely a small slender variety of *malachurus*, far less remarkable than some variations that occur in other species. The two forms as a rule are recorded from the same localities, where these have been much investigated, and, although *longulus* ♀ has been taken by several collectors in numbers at the end of July and in August, no ♂ distinct from *malachurus* seems ever to have occurred. The genital armature figured by Saunders as that of *longulus* is clearly that of *H. paucillus* v. *immarginatus*, very large males of which are frequent. Smith's supposed males of *longulus* were merely *fulvicornis* K. On the Continent a ♂ has been assigned to *longulus*, but, although the ♀ is common, this ♂ is so rare that I have been unable to procure one, and I suspect that it will prove to be either a variety of *malachurus* or to belong to some other species more rare than *longulus*. As we noticed on one occasion that a colony of *H. maculatus* produced a second brood in September, of larger size than the fresh individuals that emerged in July, it may be that a similar case is presented by *malachurus* in some seasons. As to *H. arnoldi* the ♂, in my opinion, is at most a slight variety of *minutissimus* K., while the ♀ type belongs to a different group (*sensu restr.*) of *Halictus*, and has no connection with the ♂. But for the supposition that these were sexes of one species, I do not think that Saunders would have described it.

Although I have not seen British specimens agreeing with recent descriptions, made after examination of Schenck's types, of *paucillus*, ours being the species called *immarginatus* Sch. on the Continent, yet the characters supposed to separate the two are so slight, and British specimens of *immarginatus* are so variable, sometimes closely approaching *paucillus*, that I have considered the two forms as mere varieties of one species.

(To be continued.)

A SCALY-WINGED PSOCID, NEW TO SCIENCE, DISCOVERED IN
BRITAIN*.

BY DR. GÜNTHER ENDERLEIN (BERLIN).

I have received from England, through Dr. Hugh Scott, an interesting and hitherto unknown genus of Copeognatha, belonging to the subfamily *Echinopsocinae* of the *Lepidopsocidae*. It was found in

* In the manuscript from which this paper is translated the title is "Beiträge zur Kenntnis der Copeognathen, VI," and it is stated in a footnote that no. V. of this series was published in Zool. Jahrb., Abt. f. Syst., Bd. 41, 1918, pp. 487-8, pl. 8 and 1 text-fig.

a house at Crowborough, Sussex, by Dr. F. J. H. Jenkinson. Up till now only two genera of Echinopsocinae were known, namely *Echinopsocus* Enderl. 1903 and *Scolopama* Enderl. 1906. The former was discovered in New Guinea (*E. erinaceus* Enderl.), the latter in Ceylon (*S. halterata* Enderl.). The discovery of this third genus in Europe is therefore astonishing, and one cannot altogether rule out the possibility that it may have been accidentally imported into England, particularly as the creature, though indeed small, is nevertheless remarkable from its covering of scales and striking coloration, and would otherwise almost certainly have been already recorded.

Table of genera of subfamily ECHINOPSOCINAE.

1. Radialis not touching the media at any point. Axillaris and subcosta not developed. Media two-branched. Wing with quite bluntly-rounded apex *Pteroxanium* Enderl., nov. gen.
Radial-ramus touching the media. Axillaris and subcosta developed. Wings acuminate 2.
2. Media two-branched. Basal section of radial-ramus completely reduced. Wings very sharply drawn out at apex *Echinopsocus* Enderl., 1903.
Media three-branched. Basal section of radial-ramus present. Wings moderately sharp at apex *Scolopama* Enderl., 1906.

Fam. LEPIDOPSOCIDAE. Subfam. ECHINOPSOCINAE.

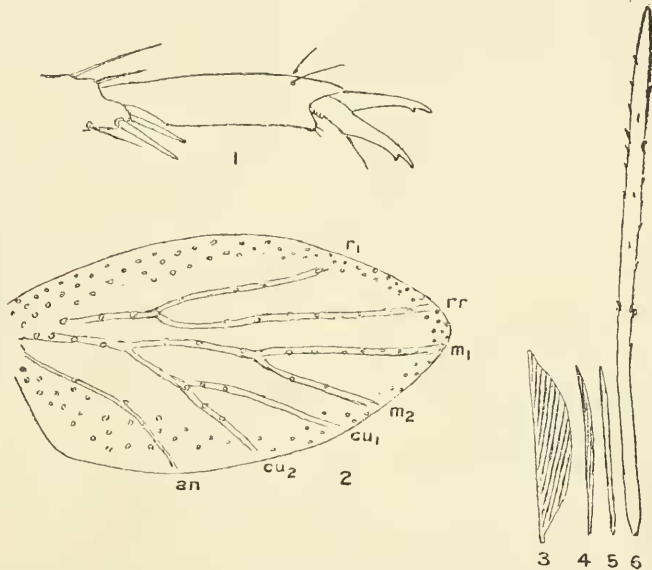
PTEROXANIUM, nov. gen.

[Type: *P. squamosum*, nov. spec., England.]

Antennae 2+22-segmented, the flagellar segments slender, becoming gradually longer towards the apex; each flagellar segment, except the apical segments, a little dilated at the end. *Eyes* with rather long pubescence. *Prothorax* very short, compressed from front to back, and somewhat drawn up dorsally in the form of a lamella, so that it reaches over the mesothorax. *Wings* scale-shaped, curved like elytra, and reaching to the apex of the abdomen: rather bluntly rounded at the apex: subcosta (*sc.*) not developed: *r*₁ and *rr* forming a handle nearer the base than the middle, *rr* not forked: radius nowhere united with media (*m*): media (*m*₁ and *m*₂) two-branched: cubitus (*cu*₁ and *cu*₂) forked: analis (*an*) distinct: axillaris (*ax*) not discernible. A fairly broad border round the wing-margin, and the veins, are set with large, stout, perpendicularly erect bristles (the hollow cups in which they are inserted are indicated in fig. 2), which are set with a certain number of microscopically fine, obliquely upstanding, points (fig. 6). The wings are set with asymmetrical scales, one side of which is straight, the other curved (fig. 3); the longitudinal fluting on these runs a little obliquely to the straight side of the scale. Besides scales the wings bear also hairs of the same length as the scales, and all gradations between scales and hairs. *Hind wings* apparently quite absent. *Tarsal claws* slender, with a sharp tooth near the apex.

Pteroxanium squamosum, nov. spec.

♀. *Head* of a pale brownish shade, frons and vertex when viewed in certain directions (especially obliquely from behind) with a faint greyish-white lustre, with which is mingled a trace of bluish sheen: clypeolus and labrum black, clypens only black in the front third or as far as the middle. *Antennae* yellowish-brown, very slender, the scanty pubescence very long, about three times as long as the thickness of the flagellum. *Maxillary palp* yellowish-brown, terminal segment broadened to the apex somewhat in the form of an axe. *Frons* and *vertex* with scattered brown spots, which are denser at the hind margin of the frons and the margins of the eyes: clothed with long, bristly, upstanding, moderately dense, brass-yellow hairs. *Thorax*



Pteroxanium squamosum, ♀: 1, terminal segment and claws of hind tarsus; 2, venation of front wing, $\times 48$; 3, scale from front wing; 4, intermediate between scale and ordinary hair of wing; 5, ordinary hair of wing; 6, one of the erect perpendicular bristles from the wing; 3-6, all equally magnified.

and *abdomen* light brownish-yellow: abdomen above somewhat flattened and set with scales, with not very sharply defined blackish markings, especially near the lateral margins. *Femora* dark brown, light brownish-yellow at the extreme apex. *Tibiae* dark brown, the following parts light brownish-yellow; in the front leg, the 4th and 7th sevenths; middle leg, 3rd and 6th sixths; hind leg, 3rd, 4th, and 7th sevenths; the tibiae bear numerous, very long, upstanding bristles. *Tarsi* light brownish-yellow, first quarter of the metatarsus infuscated. *Wing-membrane* hyaline, veins very pale, completely covered with scales, hairs and bristles: hairs and scales dense, shining light brass-yellow*, on the 4th fifth and the 10th tenth of the wing blackish-brown:

* In the two specimens retained in England, the parts which Dr. Enderlein describes as light brass-yellow appear (in bright daylight) more of a pale straw or buff: but the texture of the scales is such that their colour and reflection probably look very different according to the nature and direction of the illumination.—H. S.

the erect, perpendicular bristles are blackish, in the apical fifth light brass-yellow: in the undenuded wing the veins are only recognizable by the longitudinal series of bristles along them, but they themselves are quite indistinct. *Length*: body (of dried insect) ca. $2\frac{1}{4}$ mm.; front wing, $1\frac{1}{4}$ mm.; antenna, ca. 3 mm.; hind tibia, 2 mm.

Hab. Crowborough, Sussex: in a house, October 1st, 1921, four specimens (*F. J. H. Jenkinson*).

Two *cotypes* in the author's collection: also one example in the British Museum and one in Cambridge University Museum.

[Dr. Jenkinson states that he only saw the four examples which were captured: one was found among some clothes which had lain overnight in a bedroom, another was on a table in another room, and he cannot recall exactly in what part of the house the remaining two were taken. The house had been occupied only just twelve months. The occurrence of various species of Psocids, both fully-winged and flightless, inside houses, has been frequently observed. It is mentioned, for instance, by E. E. Green in his supplementary note to Dr. Enderlein's important paper on the scaly-winged Copeognatha of Ceylon, *Spolia Zeylanica*, iv. 1906, p. 123. Sometimes certain species are present in very great numbers, forming veritable swarms on the ceilings and walls of rooms: the occurrence of such a swarm (composed of two winged British species) in a quite new house at Cambridge is recorded in *Ent. Mo. Mag.* 1916, p. 20.—HUGH SCOTT].

A NEW FUNGUS-FEEDING GALL-MIDGE.

BY F. W. EDWARDS, F.E.S.

The remarkable insect to be described below was first obtained in the larval state in Verdly Wood, North Sussex (a few miles south of Haslemere), in the summer of 1921 by Mr. J. Ramsbottom of the Botanical Department of the British Museum, who was collecting with Mr. E. E. Green at the time. Mr. Green at the first glance took them for *Coccidae*, but soon discovered them to be *Cecidomyiidae* and passed them on to me. Subsequently I myself found some dead pupae in a wood at Datchworth, Herts. Probably therefore the species, though hitherto overlooked, is widely distributed in suitable localities.

The habitat of the larva is in a bark-encrusting fungus which Mr. Ramsbottom has determined as a species of *Hypochnus*, probably *H. fuscus*. Small, more or less circular, blister-like swellings are formed on the surface of the fungus; the swellings are about 2 mm. in diameter